

EXECUTIVE SUMMARY

The California Department of Transportation Central Region (Caltrans) requested assistance from the Foundation of California State University, Monterey Bay (CSUMB) in implementation of an erosion control and re-vegetation program for the west side of the Highway One McWay Landslide, near Big Sur, California, using native plants and seed collected from the local coastal sage scrub habitat. CSUMB was also to monitor and report on the relative success and/or failure of the erosion control treatments that were used at the McWay slide. (Task 1). In addition, Caltrans requested that CSUMB develop a regional restoration model and analysis for re-vegetation of landslides along the Big Sur Coast (Task 2). The primary purpose of the project is to assist Caltrans in the development of methods to mitigate the impacts of surface erosion from highway maintenance activity on water quality, wildlife, and habitat.

In Chapter One (Task 1) the results of erosion control and re-vegetation work conducted at McWay in the year 2000 are reported. The geologically stable area of the landslide and side-cast material has an established cover of perennial grasses, shrubs, and willows from plantings from the last two years work. The unstable area had a major slippage in early 2000 and lost its perennial plant coverage. This area has been covered with straw and re-vegetated with an annual grass.

Chapter Two (Task 2) summarizes the detailed regional restoration model that was developed including analyses for re-vegetation of landslides along the Big Sur Coast. A total of eighteen potential erosion sites along the Highway One corridor were identified, from Carmel to the San Luis Obispo County line. Ten of the eighteen sites (primary potential erosion sites; subsequent eight sites are referred to as secondary) were selected and specifications developed for their re-vegetation.